



\*\*FILE\*\* ID\*\*OTSCCBDA

C 9

00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000  
TTTTTTTTTTTT SSSSSSSSSSSS CCCCCCCCCC CCCCCCCCCC BBBBBBBBBB DDDDDDDDDD AAAAAAA AAAAAAA TTTTTTTTTT  
00 00 TT SS CC CC BB BB DD DD AA AA AA TT  
00 00 TT SS CC CC BB BB DD DD AA AA AA TT  
00 00 TT SS CC CC BB BB DD DD AA AA AA TT  
00 00 TT SS CC CC BB BB DD DD AA AA AA TT  
00 00 TT SSSSSS CC CC BBBBBBBBBB DD DD AA AA AA TT  
00 00 TT SSSSSS CC CC BBBBBBBBBB DD DD AA AA AA TT  
00 00 TT SS CC CC BB BB DD DD AAAAAAAA AA AA TT  
00 00 TT SS CC CC BB BB DD DD AA AA AA TT  
00 00 TT SS CC CC BB BB DD DD AA AA AA TT  
00 00 TT SSSSSS CCCCCCCC CCCCCCCC BBBBBBBBBB DDDDDDDDDD AA AA AA TT  
00 00 TT SSSSSS CCCCCCCC CCCCCCCC BBBBBBBBBB DDDDDDDDDD AA AA AA TT  
...

```
1 0001 0 MODULE OTSSSCCB_DATA (
2 0002 0     IDENT = '1-002'
3 0003 0   )
4 0004 1 BEGIN
5 0005 1 !
6 0006 1 ****
7 0007 1 *
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25 0025 1 *
26 0026 1 *
27 0027 1 ****
28 0028 1 ++
29 0029 1 FACILITY: language support library
30 0030 1
31 0031 1 ABSTRACT:
32 0032 1
33 0033 1
34 0034 1 This module holds the OWN storage for manipulating
35 0035 1 the CCB (the LUB/ISB/RAB). The data in this module
36 0036 1 is referenced by OTSSSCCB and FORSSCB.
37 0037 1
38 0038 1 ENVIRONMENT: User mode, AST level or not or mixed
39 0039 1
40 0040 1 AUTHOR: John Sauter, 16-AUG-1979
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original, from OTSSSCCB version 1-047. JBS 16-AUG-1979
45 0045 1 1-002 - Initialize OTSSL_CUR_LUN and OTSSL_LVL_CTR at link time,
46 0046 1 since FORTRAN doesn't call any initialization code.
47 0047 1 JBS 14-JAN-1980
48 0048 1 --
49 0049 1
50 0050 1 !<BLF/PAGE>
```

```
52      0051 1 ! SWITCHES:  
53      0052 1 !  
54      0053 1 !  
55      0054 1 !  
56      0055 1 ! SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);  
57      0056 1 !  
58      0057 1 !  
59      0058 1 !  
60      0059 1 !  
61      0060 1 !  
62      0061 1 !  
63      0062 1 !  
64      0063 1 !  
65      0064 1 !  
66      0065 1 !  
67      0066 1 !  
68      0067 1 !  
69      0068 1 !  
70      0069 1 REQUIRE 'RTLML:OTSISB';           ! get length of ISB  
71      0237 1  
72      0238 1 REQUIRE 'RTLML:OTSLUB';           ! get length of LUB  
73      0378 1  
74      0379 1 REQUIRE 'RTLIN:RTLPSECT';          ! Define DECLARE_PSECTS macro  
75      0474 1  
76      0475 1 REQUIRE 'RTLIN:OTSCCBREQ';          ! Define interface to OTSS$PUSH_CCB  
77      0573 1  
78      0574 1 LIBRARY 'RTLSTARLE';             ! STARLET library for macros and symbols  
79      0575 1  
80      0576 1 !  
81      0577 1 !  
82      0578 1 !  
83      0579 1 !  
84      0580 1 !  
85      0581 1 !  
86      0582 1 !  
87      0583 1 !  
88      0584 1 !  
89      0585 1 !  
90      0586 1 !  
91      0587 1 !  
92      0588 1 !  
93      0589 1 !  
94      0590 1 !  
95      0591 1 !  
96      0592 1 !  
97      0593 1 !  
98      0594 1 !  
99      0595 1 !  
100     0596 1 !  
101     0597 1 !  
102     0598 1 !  
103     0599 1 !  
104     0600 1 !  
105     0601 1 !  
106     0602 1 !  
107     0603 1 !  
108     0604 1 !  
  
MACROS:  
NONE  
EQUATED SYMBOLS:  
NONE  
PSECT DECLARATIONS:  
DECLARE_PSECTS (OTS);           ! declare PSECTS for OTSS facility  
GLOBAL STORAGE:  
GLOBAL  
    OTSSA_CUR_LUB : INITIAL (0),          ! Contains the address of the current I/O  
    +  
    Bit 0 of the following longword is zero if the queue headers have not  
    yet been set up.  
    -  
    OTSSV_CCB_INIT : VOLATILE INITIAL (0),  
    +  
    The following quadwords constitute queue headers, one for each LUN.  
    Each queue will normally either be empty (meaning that no LUB is  
    allocated) or contain one item, the LUB. The field LUB$Q_QUEUE is  
    used for the queue linkage. Under certain circumstances a second  
    LUB may be placed in the queue and then quickly removed.
```

```

: 109      0605 1 !-
: 110      0606 1 !- OTSS$AA_LUB_TAB : VOLATILE OTSS$LUB_TAB ST !
: 111      0607 1 !- [-LUBSK_ILUN_MIN + LUBSK_LUN_MAX + T, LUBSK_ILUN_MIN],
: 112      0608 1 !+
: 113      0609 1 !+ Each bit of the following BITVECTOR corresponds to a LUN. The bit is
: 114      0610 1 !+ set if there is any I/O activity outstanding for the LUN. The bit
: 115      0611 1 !+ must be kept here rather than in the LUB because there can be I/O
: 116      0612 1 !+ activity outstanding even before the LUB is allocated.
: 117      0613 1 !-
: 118      0614 1 !- OTSS$V_I0INPROG : VOLATILE BITVECTOR !
: 119      0615 1 !- [((T-LUBSK_ILUN_MIN + LUBSK_LUN_MAX + %BPVAL)/%BPVAL)*%BPVAL].
: 120      0616 1 !+
: 121      0617 1 !+ The following cell contains the logical unit number of the current
: 122      0618 1 !+ unit. It is used in place of OTSS$AA_CUR_LUB when pushing to avoid
: 123      0619 1 !+ a problem with removing the LUB from the [LUB table prior to
: 124      0620 1 !+ deallocating it. When it contains a value one greater than the max
: 125      0621 1 !+ permitted value then there is no current LUB.
: 126      0622 1 !-
: 127      0623 1 !- OTSS$L_CUR_LUN : INITIAL (LUBSK_LUN_MAX + 1),
: 128      0624 1 !+
: 129      0625 1 !+ The following cell acts as a level counter. For efficiency the
: 130      0626 1 !+ LUN pushing and popping routines are not called at the top level
: 131      0627 1 !+ because, first, they would have nothing useful to do and, second,
: 132      0628 1 !+ the top level is used much more frequently than the lower levels.
: 133      0629 1 !-
: 134      0630 1 !- OTSS$L_LVL_CTR : INITIAL (-1),
: 135      0631 1 !+
: 136      0632 1 !+ The following vector of bits is used to record ownership of each LUN.
: 137      0633 1 !+ If the bit corresponding to a particular language is set, the language
: 138      0634 1 !+ owns the LUN.
: 139      0635 1 !-
: 140      0636 1 !- OTSS$V_LUN_OWNR : BLOCKVECTOR [-LUBSK_ILUN_MIN + LUBSK_LUN_MAX + 1,
: 141      0637 1 !- ((LUBSK_LANG_MAX + %BPUNIT)/%BPUNIT), BYTE];
: 142      0638 1 !-
: 143      0639 1 !: EXTERNAL REFERENCES:
: 144      0640 1 !: NONE
: 145      0641 1 !:
: 146      0642 1 !:
: 147      0643 1 !:
: 148      0644 1 END ! End of module OTSS$CCB_DATA
: 149      0645 1 !:
: 150      0646 0 ELUDOM

```

```

:TITLE OTSS$CCB_DATA
:IDENT \1-002\

.PSECT _OTSS$DATA,NOEXE, PIC,2

00000000 00000 OTSS$A_CUR_LUB::          ; LONG 0
00000000 00004 OTSS$V_CCB_INIT::         ; LONG 0
00008 OTSS$AA_LUB_TAB::                  ; BLKB 1024
00408 OTSS$V_I0INPROG::                 ; BLKB 16
;
```

OTSS\$CCB\_DATA  
1-002

G 9  
16-Sep-1984 01:24:18 VAX-11 Bliss-32 V4.0-742  
14-Sep-1984 12:39:38 [LIBRTL.SRC]OTSCCBDAT.B32;1

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OT  
1-0

00000078 00418 OTSS\$L\_CUR\_LUN::  
                  .LONG 120  
FFFFFFF 0041C OTSS\$L\_LVL\_CTR::  
                  .LONG -1  
00420 OTSS\$V\_LUN\_DWNR::  
                  .B[KB] 128

PSECT SUMMARY

Name	Bytes	Attributes
_OTSSDATA	1184	NOVEC, WRT, RD ,NOEXE,NOSHR, LCL, REL, CON, PIC.ALIGN(2)

Library Statistics

File	Total	Symbols	Pages Mapped	Processing Time
\$_255\$DUA28:[SYSLIB]STARLET.L32;1	9776	0	581	00:00.8

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS\$:OTSCCBDAT/OBJ=OBJ\$:OTSCCBDAT MSRC\$:OTSCCBDAT/UPDATE=(ENH\$:OTSCCBDAT  
)

Size: 0 code + 1184 data bytes  
Run Time: 00:04.3  
Elapsed Time: 00:23.7  
Lines/CPU Min: 9120  
Lexemes/CPU-Min: 63190  
Memory Used: 86 pages  
Compilation Complete

0211 AH-BT13A-SE  
VAX/VMS V4.0

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LIS

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LIS

LIBWAIT  
LIS

OTSCLOSEF  
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